

# CUBIT Capability Proposal

## Technical Area

Geometry, Meshing, Infrastructure, GUI, Graphics, etc..

Geometry

## Technical Lead

Cubit Developer in charge of technical area

Byron Hanks

## MRD Description

Describe the capability in terms of how a user would see it.

IDs will NEVER, EVER change

## SRS Description

What needs to be done by Cubit developers to implement this capability? Break the tasks into steps if applicable. (Steps should be on the order of 2 man-weeks or more)

Implement mechanism in CUBIT to ensure that consistent geometry ids are maintained when underlying geometry-producing/modifying algorithms are changed and the change should be transparent to the user.

## Justification

Describe why this is important and what impact it will have if it is implemented. (or not implemented).

We are currently unable to perform transparent-to-the-user changes in underlying geometry-producing/modifying algorithms in CUBIT for efficiency or other purposes because the order in which the geometry is returned can be different, causing geometry to have different ids. This causes huge problems when the user references geometry ids downstream in a journal file. ACIS frequently offers new and improved api's but we are unable to take advantage of these in existing algorithms because the change almost always results in id changes.

## Resources

Who will work on this

## Time estimate

How much time will it take in man-weeks

## Targeted Release

10.2 (August 06), 10.3 (March 2007), 10.4 (August 2007), Future (beyond FY07)

Corey Ernst

12-16 weeks...maybe more

10.3

## Submitted By:

Corey Ernst

## Date:

03/22/06